



HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication.

(7029) J. H. F. says: In looking over the SCIENTIFIC AMERICAN of May 30, 1896 (6869), I saw a formula to make a putty for picture frames.

(7030) O. P. W. says: Will you please give me a receipt for a lacquer for brass? A. 1. Seed lac, dragon's blood, annatto, and gamboge, each 4 ounces; saffron, 1 ounce; alcohol, 10 pints.

(7031) L. M. B. says: Will you please publish in your paper a formula for keeping the hair curled for a number of days and in damp weather?

TO INVENTORS. An experience of nearly fifty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere.

INDEX OF INVENTIONS For which Letters Patent of the United States were Granted

November 10, 1896, AND EACH BEARING THAT DATE. (See note at end of list about copies of these patents.)

Table listing inventions such as Air brake, Alarm, Animal shears, Annular casting, Annunciator, Automatic sprinkler, Axle box, Axle box lid, Bag frame catch, Band cutter and feeder, Bandage, Battery, Bell, Bicycle, Bicycle alarm lock, Bicycle bearing bracket, Bicycle handle bars, Bicycle package carrier, Bicycle saddle, Bird cage, Bolt, Blackening apparatus, Bottle filling apparatus, Bottle, non-refillable, Bottle, non-refillable, O. J. Moussette, Bottle, nursing, W. L. Roth, Box, See Electric wall box, Fancy box, Brake, See Air brake, Fluid pressure brake, Vehicle brake, Brake, Kruse & Holst, Broom or brush, Broom, F. S. Hann, Bucket, coal, E. Bee, Burial alarm, electric, C. Coleman, Burton setting machine, E. D. Welton, Calcium carbide, composition of matter for manufacturing, H. Eldridge et al.

Table listing inventions such as Calculating machine, tax, J. L. Knight, Calendar, sheer, W. T. Wilson, Cane handling apparatus, A. A. Lorio, Car vehicle for hauling sugar, A. A. Lorio, Car bolster, W. C. Hunter, Car brakes, slack adjuster for railway, M. J. Grier, Car coupling, F. J. Baker, Car coupling, F. J. Flynn, Car coupling, J. Hien, Car coupling, J. A. Hinson, Car coupling, M. L. Mardis, Car coupling, J. C. Taylor, Car coupling, M. I. Welch, Car draught iron, railway, W. Case, Car dump, E. A. Trapp, Car sand depositing apparatus, J. Oldfield, Car tender, I. N. Stanley, Car tender, unremittent rotary, Holloway & Starkweather, Car grain door, T. R. Parker, Car safety tender, street, J. W. Angell, Car sand depositing apparatus, J. Oldfield, Carriage attachment for lamps, M. F. Brigham, Carriage, folding, F. Heppner, Case, See Display case, Surgical instrument case, Traveling case, Cash register, Sharpe & Banfield, Caster, furniture, M. Lauchman, Cattle guard, E. W. Wagon, Cereal, machine for reducing and preparing, H. D. Perky, Cereals, machine for reducing, H. D. Perky, Chair, See Convertible chair, Chimney, mechanism, A. E. Olney, Churn, W. R. Gibson, Cigarette machine pasting mechanism, J. S. Bee-man, Circuit breaker, automatic, W. H. Powell, Circuit closer, automatic safety, Pratt & Ripley, Cistern cleaner, J. A. McAuley, Clamp, See Pipe clamp, Clamp joint, A. Edquist, Clock mechanism, calendar, T. W. R. McCabe, Cloth stretching machines, automatic clamp for, H. W. Bingham, Coal crucible and brick rolls, W. V. Carter, Coal shovel and ash filter, combined, T. B. Sorenson, Cock, angle, T. A. Outhouse, Cocoa, preparing, G. A. Pieper, Coin holder, E. W. Wagon, Colter holder, F. M. Cook, Composition of matter, F. H. Hall, Convertible chair, L. A. Chichester, Corn husking machine feeder, J. Bauer, Jr., Cornstalk shredder and snapping machine, Tracy & Platt, Cornet, H. G. Neely, Counter attachment, sales, Walkinshaw & Kapp, Coupling, See Car coupling, Hose coupling, Cultivating and clearing land, machinery for, T. Cooper, Cultivating, J. G. Harting, Cultivation of asparagus, C. A. von Matzahn, Cultivator, E. Haiman et al., Cultivator, two-row, S. I. Bailor, Current motor, M. G. Bunnell, Curtain fixture or support, G. W. Bamford, Cutter, See Band cutter, Cycle, H. Brings, Dental operating chairs, chin rest for, J. F. Adams, Dental plugger, R. N. Stockton, Display case, bottle, A. J. Wallis, Dried, combined, B. Jackson, Door check, T. Curley, Door lock, hotel, C. W. Andrews, Doors, etc., apparatus for manufacturing, W. W. Grier, Draught regulator and spark arrester, combined, R. Deissler, Draught rizing, T. Eubank, Dressmaker's stand, A. L. Jones, Drill, See Ratchet drill, Rock drill, Drilling or boring tool, B. & T. Wesselmann, Easel, T. Filippow, Easer support, W. A. Holman, Electric light attachment, J. E. Rusby, Electric machine, dynamo, G. E. Dorman, Electric machine, dynamo, R. Lundell, Electric meter, Burger & McFall, Electric meter, C. Wirt et al., Electric motor, C. W. Hibbard, Electric switch, W. F. Hibbard, Electric wall box, W. F. Bossert, Electrical discharge device, C. D. Finney, Electrical distribution system, M. J. Kelly, Electrical distribution system, J. & Chesney, Embroidery holder, W. C. Maynard, Engine, wagon, B. T. Murphy, Engine, See Internal combustion engine, Steam engine, Engine, M. A. Yeakley, Evaporator, D. A. Quiggin, Exhauster, L. Schutte, Fancy box, H. & A. H. Stevenson, Fastening, apparatus for making and drying metallic, Hamm & Eaton, Faucet, A. Clarke, Feed trough, E. J. Nason, Fence, J. T. Conover, Fence, Lee & Sawyer, Fence machine, E. D. Patton, Fence picket vice, F. A. Roseman, Fender, See Car fender, Car safety fender, Plow fender, Fiber preparing machine, Radclyffe & Burrows, Filter, J. M. Davidson, Filtering and drying liquids, apparatus for, A. C. Newcomb, Fire escape, J. S. Crawford, Fire extinguisher, automatic, C. E. Buell, Fireproof door, door frame and window frame and shutter combination, T. Bailey, Fittings under pressure, means and construction for inserting, F. Sheridan, Fluid pressure brake, D. Dunn, Forceps, bone, A. De Villbis, Fruits, apparatus for treating dried, H. A. Turner, Jr., Furnace, See Boiling furnace, Metallurgical furnace, Reheating furnace, Smelting furnace, Steam furnace, Furnace fuel feeder, W. Rubl, Furnace grate, G. Dupmeyer, Furnaces, automatic regulation apparatus for hydrocarbon, A. Stagle, Fuse block, multiple, E. H. Montgomery, Gage, See Micrometer gage, Micrometer beam gage, Game counter, J. Solatino, Garment supporter, M. A. Farrington, Gas generator, C. A. Burton, Gas lighting device, electric, E. Schmidt, Gas, manufacturing, J. L. Janeway, Gas manufacturing apparatus, P. Brentini, Gas mixing apparatus, R. G. Kirkwood, Gate, See End gate, Gate, H. G. Bowman, Gate, H. V. Philpott, Gate, Showalter & Carver, Gear, equalizing, C. C. Burton, Gearring, F. J. Woods, Generator, See Magneto generator, Glass article, stone being finished, clutch for holding, W. J. Wilkinson, Gluing machine, shuck, W. F. Hutchinson, Gram binder, L. Miller, Grain drill speed gearing, R. Galloway, Grain drying apparatus, T. G. Frost, Grater, nutmeg, E. D. Patton, Grave lining, J. A. Knarr, Grease-proofing articles, compound for, Shober & Ullmann, Grinding machine, knife, Snow & Sherman, Harness attachment, W. A. Seibel, Harrow, Jackson & Rheaness, Harvester, corn, C. Schulze, Harvester, grain binding, L. Miller, Heater, E. C. Hall, Heater, J. Mahedy, Heating apparatus, electric, A. E. Appleyard, Heating boiler, E. A. Wood, Heel nailing machine, C. W. Glidden, Helmet, smoke, C. G. M. Reichel, Hinge, couch or bed, A. Huttlinger, Hinge, spring, H. A. Hoffman, Hoisting and stone laying apparatus, G. Hunter, Hose coupling, R. W. Burkhardt, Hose machine, R. T. Burbell, Hosi nozzle, C. Callahan, Hose nozzle, J. J. Ledden, Hydraulic or other engine, J. E. Schumacher, Ice, apparatus for manufacturing, W. F. Singer, Ice cream mould, E. L. Frange, Ice cream mould and dipper, F. D. Clark, Ice cream mould and disher, H. J. Pfeiffer, Indicator, See Station indicator, Inkstand, J. W. Jacobson, Internal combustion engine, C. W. Pinkney, Iron, electrolysis of, A. S. Ramage, Ironing table, J. H. Foster, Jack, See Wagon jack, Joint, See Clamp joint, Joints, repair device for stopping leaky, S. R. Dresser, Key, See Time recorder key, Ladder, extension, J. F. Mack, Lamp chimney protector, A. Doherty, Jr., Lamp electric, R. M. Hunter, Lamp, electric arc, H. R. Palmer, Lamp, gas, J. F. McElroy, Lamp globe, Ballou & Seaver, Lamp, street, C. R. Lindsay, Jr., Lather cutting machine, A. L. Sweet, Leather for forming pockets, machine for splitting, A. L. Sweet, Leather loop finishing machine, A. L. Sweet, Leather slitting machine, A. L. Sweet, Leather trimming machine, A. L. Sweet, Lift hoist for warehouses, H. F. Donaldson, Lifting and loading cooking apparatus for, J. G. Pennycook, Lightning arrester, J. P. Culgan, Lightning arrester, A. J. Wurts, Lock, See Bicycle alarm lock, Door lock, Rim lock, Seal lock, Lock, stop mechanism for time, Hollar & Pidgeon, Locomotive boiler, C. O. Heggem, Locomotive draught regulator, Deener & Deissler, Locomotive, electric, J. F. McLaughlin, Locomotive, E. von Oberleithner, Loom harness frame, H. W. Hakes, Loom reed, J. Adamson, Loop forming and pressing machine, A. L. Sweet, Lumber, E. E. Miller, Magneto field, J. Wood, Magneto generator, J. C. Francis, Mail bag, F. L. Boynton, Match, J. W. Denmead, Match box shucks, machine for making and sanding, W. H. Bellan, Match safe, Huesel & Mader, Mattresses, register for folding, H. S. McCormick, Measuring device, liquid, G. W. Curtis, Metal planing machines, automatic feed stop for, A. M. Powell, Metal planing machines, feed operator for, A. M. Powell, Metals under pressure, apparatus for treating heated, G. A. Dick, Metallurgical furnace, B. Talbot, Meter, See Electric meter, Microscope beam eye, J. J. McIntyre, Micrometer gauge, C. W. Eberly, Mitten, bicycle, T. H. Royce, Mould pattern, collapsible and adjustable, M. A. Baker, Motion, device for converting, W. E. Watkins, Motor, See Current motor, Electric motor, Music box damper, F. J. Bernard, Net lifting machine, W. F. Abear, Nut lock, O. S. Ebert, Nut lock, C. T. Redfield, Nut lock, axle, O. S. Ebert, Nut wrench, axle, T. G. Clifford, Nut wrench, axle, W. E. Kleckner, Ores, etc., apparatus for compressing and agglomerating, J. W. Nell, Package, airtight, F. Falk, Paint compound, C. V. Petrus, Paper machine, F. P. Nicely, Pencil and penholder, combined, J. D. Kious, Pencil point protector, combination, C. S. Freer, Photographic dark room, portable, W. T. Ferguson, Photographic prints, forming, Sampolo & Brass-aur, Piano, W. A. Byrne, Piano, electrical self playing, G. H. Davis, Piano, grand, self rebruger, P. J. Seeley, Pin, See Safety pin, Pincushion, J. McCartney, Pipe clamp, F. Anderson, Pipe coupling device, automatic, W. E. Crowson, Pipe fitter's combination tool, Kriteber & Welsh, Pistol, recoil magazine, H. Robinson, Planting machine, W. E. Cheeseman, Pliers, parallel jaw, A. Schatz, Plow fender, A. G. W. Foster, Powder distributor, C. M. Arthur, Power, See Pump power, Printer's chase, Harding & Osborn, Printing attachment for letter boxes, B. L. Hargrove, G. P. Van Wyk, Printing press, F. Huber, Professor, L. G. Johnson, Propulsion of vessels, J. H. Mosley, Pulley, wood, H. C. Crowell, Pulping apparatus, C. W. Roberts, Pump power, Fulton & Ames, Pump regulator, automatic, J. C. Sterns, Puzze, P. Feldhof, Rail chair, W. Campbell, Railway crosstie, A. Bidwell, Railway crossing, D. Colten, Railway crossings, electrically controlled derails for, J. Coleman, Railway signal, W. D. Hartz, Railway street sprinkler, J. B. & J. B. Gathright, Railway switches, device for operating, J. A. Marsh, Railway switches, A. E. Finley, Ratchet drill, M. M. Watkins, Recorder, See Time recorder, Recording output of machinery, apparatus for, P. Dillon, Reel, See Wire reel, Register, Cash register, Reheating furnace, W. H. Bailey, Rim lock, W. H. Taylor, Rivet, J. Temler, Rock drill, L. H. Jenkins, Rods or bars, apparatus for treating, G. H. Geyer, Roller mill adjusting, M. Favrow, Roof truss, G. J. Stouffer, Rubber working machine, F. Hadfield, Rule miter rack attachment, F. Reissmann, Safety pin, A. T. Snell, Sash weights, task for making seamless, A. S. Hodge, Saw, S. Olden, Saw sharpening machine, Holley & Rawlings, Scale pan, G. S. Forscheimer, Sea lock, D. Comfort, Seal lock, W. P. Huntley, Jr., Sealing device, bottle, A. B. Cowart, Seed means for treating, B. Bee, Sewing machine, H. H. Bufum, Sewing machine, J. F. Hardy, Sewing machine, F. A. Mills, Sewing machine, W. D. Rundlett, Sewing machine, G. G. Slade, Sewing machine, D. W. Stevenson, Sewing machine, overedge, H. A. Klemm, Sewing machine spool holder, L. E. Smith, Sewing machine table, N. A. Hui, Sewing machines, hair dividing attachment for overedge, H. Klemm, Shaft, bicycle, P. F. Chambers, Shearing or cutting tool, combined, R. M. Hunter, Shears, See Animal shears, Shears, P. Haase, Shaving, library, G. Stikeman, Shoe pull, G. Muller, Shoe pulling trip for laced, J. Sabine, Shoes or bank protector and method of and apparatus for constructing and placing same, D. Neale, Sieve, flour mill, J. Denis, Signal, See Railway signal, Signaling apparatus, fog, D. Slade, Signaling apparatus, pneumatic, F. Schieffer, Sling trip, Nadler & Le Blanc, Smelting furnace, H. Charler, Soap reservoir, liquid, E. Lee, Spark arrester and draught regulator, combined, R. Heissler, Spinning frame, ring, S. H. Dubois, Sprinkler, See Automatic sprinkler, Railway street sprinkler, Stand, See Dressmaker's stand, Starching machine, D. H. Newton, Station indicator, D. E. Conner, Steam and explosion engine, combined, W. Barsdale, Steam engine, H. S. Peck, Steam engine, H. Barton, Steam furnace, Hutchinson & Wiegand, Steam generators, means for closing tubes of, N. W. Pratt, Stock guard, J. M. Lee, Stocking, A. W. Brown, Stoker, underfed, D. F. Graham, Storage battery, electric, T. W. Allan, Stove, gas or oil, S. L. Richards, Stove lid, G. B. Littlefield, Street sweeper, M. B. Atkinson,

Table listing inventions such as Stubble retractor, Sulky, E. S. Keeler, Surgical instrument case, E. Lee, Suspenders, H. P. Geisler, Switch, See Electric switch, Telephone switch, Table, See Ironing table, Table, E. Bennett, Tablet machine for stenographers' use, M. P. Bonebrake, Teeth, support and carrier for artificial, H. D. Justl, Telephone magnet, E. M. & W. S. Harrison, Telephone switch, E. M. Harrison, Thermometer, oven, L. S. Barnsdorfer, Time recorder, employee's, E. W. Lindenau, Time recorder key, E. G. Heene, Tin andterne plates, machine for polishing, N. Lewis, Tires, automatic pump for pneumatic, T. M. Jenks, Tires, repair plug for pneumatic, D. W. Colbapp, Tool, combination, J. F. Ryder, Tool fishing apparatus, G. L. McKain, Tooth holder, C. E. Goodspeed, Tooth crowns, mould for shaping metallic, L. L. White, Toy and advertising machine, mechanical, C. S. Pocock, Traveling case, O. P. Hurd, Triangle and protractor, combined, W. J. Belcher, Trolley electric railway, H. D. Hockley, Trough, See Feed trough, Truck, car, T. Crawford, Truck, street car, T. H. Lovejoy, Truck, G. Crouch, Tube punctures, device for closing, W. B. Merrill, Tug, thill, W. R. Chapin, Typewriting machine, W. K. Jenne, Undergarment, A. G. Velasco, Urinal guard or screen, Maxwell & Gorman, Valve, steam stop, R. W. Mott, Jr., Valve, self-propelling, R. H. Plass, Valve, tank supply, W. Scott, Valves, eveners for two horse, J. Hook, Jr., Velocipede, E. Humbrecht, Velocipede lamp bracket, R. C. Wrayne, Velocipede working mechanism, B. Ljungstrom, Veterinary tooth cutter, T. J. Pence, Wagon jack, J. J. Adgate, Washing machine, J. H. Estes, Water closet, J. A. Reed, P. C. Macevoy, Water closet bowls, venting device for, C. H. Cook, Water closet, siphon, E. C. Stover, Water wheel, Pascault & De Coursac, Wheel, See Water wheel, Wind wheel, Wheel measurer, A. E. Remus, Wheels, detent for ratchet, W. D. Martin, Wheels, machine for making rims for pneumatic, J. Banwell, Whist apparatus, duplicate, R. M. Bent, Window, J. L. Thompson, Window, O. Edwards, Window, J. Endres, Window, M. W. Neuens, Wire fabric machine, W. C. Avery, Wire fastener, J. C. Kremer, Wire reel, C. H. Faul, Wire reel, C. H. Faul, Woodworking machine, D. Bullock, Wrench, See Nut wrench, Yarn testing machine, M. H. Tomkins,

DESIGNS.

Table listing designs such as Bicycle frame, E. N. Gates, Brush back or similar article, W. C. Codman, Erasing plate, V. Copland, Fire extinguishers, distributor for, W. Esty, Fire extinguishers, yoke for automatic, W. Esty, Ham rack, J. E. Faur, Hook, garment, E. T. & F. Smith, Match box, A. N. Clark, Sprinkler, W. Esty, Stove, cooking, H. W. Beattie, Stoveshelf section, H. W. Beattie, Tack, curtain, J. A. Numan, Valve support, W. Esty,

TRADE MARKS.

Table listing trade marks such as Kentora Brewery Company, Bicycles and tricycles, E. B. Willcox, Billiard and pool balls, Albany Billiard Ball Company, Boots and shoes, Rice & Hutchins, Cement for rubber goods, especially for bicycle tires, E. McWilliam, Cocoa, H. Maillard, Corsets, Weingarten Brothers, Cotton goods, such as bedspreads, bedquits, counterpanes, and other Jacquard woven goods, except towlens, Monadnock Mills, Crackers, biscuits and malt extracts, Chemisch- Wringbington, Cycles, velocipedes, bicycles and tricycles, J. Aucoet Daracq, Dolls, kid body bisque head, Firm of J. D. Kestner, Electrical apparatus, certain named, Chemisch-Elektrische Fabrik "Prometheus" Gesellschaft mit Beschränkter Haftung, Embalming fluids, Embalmers' Supply Company, Flour, wheat, Pearl Roller Mill Company, Garments, ready made, M. B. Brummer, Graphite and its products, United States Graphite Company, Guns, shot, Winchester Repeating Arms Company, Italian cloths, serges, silks, velvets, bludings, braids and linings, Lesher, Whitman & Company, Kola and other foods and beverage compounds of, Thomson & Taylor Spice Company, Lactate of silver, citrate of silver, and all pharmaceutical preparations of silver, Chemische Fabrik von Heyden, Gesellschaft, mit Beschränkter Haftung, Lamps, fixtures for incandescent gas, L. Hartman, Lamps, gas fixtures for incandescent gas, L. Hartman, Ledgers, assessment and tax, S. R. Fairchild, Lozenges and their confectionery, Smith & Peters, Oil, olive, F. Romeo & Company, Pasteboard and boxes, cases, wrappers, envelopes, and other articles manufactured therefrom, Thompson & Norris Company, Pens, L. Dreka, Plastic cementous material, compressible tubular holders for, Boston Woven Hose and Rubber Company, Remedies for common and simple disorders, Hance Brothers & White, Saccharine compounds, artificial, Chemische Fabrik von Heyden, Gesellschaft, mit Beschränkter Haftung, Saponaceous and alkali solutions to be mixed with soap and water for cleaning purposes, E. Burst, Shoes, Jones Shoe Manufacturing Company, Shoes, Plazee & Smith, Shoes, women's, Hamilton, Brown Shoe Company, Soda ash silicate of soda, caustic, Joseph Crosfield & Sons, Sole and heel protectors, North & Judd Manufacturing Company, Tablets for colds and hay fever, also a tonic and disinfectant, W. C. Klamau, Tea, coffee, spices, baking powder, flavoring extracts, soap and starch, Jones Brothers, Tickets or contracts, coupon, Inter-State Casualty Company, of New York, Tobies, S. Ewart & Company, Tools, holders for sharpening, T. A. Lamotte,

PRINTS.

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